

Notice of Allowability

Application No.

10/803,359

Examiner

Erin D. Chiem

Applicant(s)

MORI, KEIICHI

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/27/06.
2. ☒ The allowed claim(s) is/are 1-8.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
- ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- ☐ Notice of Informal Patent Application (PTO-152)
- ☒ Interview Summary (PTO-413), Paper No./Mail Date _____
- ☐ Examiner's Amendment/Comment
- ☒ Examiner's Statement of Reasons for Allowance
- ☐ Other _____

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance: Through further search and consideration Claims 1 and 2 are allowable over the prior art of record because the latter, either alone or in combination, does not disclose nor render obvious an optical monitor module comprising a first and second optical fibers mounted in parallel on said substrate by said position structure, said first optical fiber having an axis and a lens portion with a graded-index fiber formed integrally in one end of the first optical fiber for emitting light at an angle inclined to said axis of the first optical fiber, and said second optical fiber having an axis and a lens portion with a graded index fiber formed integrally in one end of the second optical fiber for receiving light at an angle inclined to said axis of the second optical fiber... wherein said first optical path and second optical path are through space.

Prior art Kawaguchi et al. (US 6,361,222 B1) teaches all of the structural limitations except Kawaguchi does not disclose a graded index fiber formed integrally in each ends of the first and second optical fiber. And Kawaguchi does not teach the fiber emitting and receiving light at an angle inclined to said optical axis. Furthermore, Kawaguchi does not disclose the end face of each lens portion of the fiber is angled.

Prior art Takahashi et al. (US 5,859,940) discloses an optical device having a first fiber for emitting light and a second fiber for receiving light having an integrally formed GRIN lens on the end of the first and second fiber. However, the device does not couple the emitting and receiving light "through space." Similarly, Jian (US 2003/0002809 A1) discloses all of the structural limitations of claim 1, but the emitting and receiving light does not travel "through space."

Prior art Duelli et al. (US 6,873,768 B2) discloses a fiber coupler comprising two fibers having a graded index lens integrally formed at the end of the fiber wherein the lens are cleaved at an angle. However, the fibers are not passively aligned in a parallel v-groove, on the contrary Duelli aligned the fibers at an angle α .

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There are no explicitly motivations found in the prior art of record to combine the references that applicant claimed in claims 1 and 2. Therefore, the subsequent depending claims are also allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erin D. Chiem whose telephone number is (571) 272-3102. The examiner can normally be reached on Monday - Thursday 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Erin D Chiem
Examiner
Art Unit 2883



Frank G. Font
Supervisory Primary Examiner
Technology Center 2800